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ENTER INTO NIRVANA

THE RELIGION OF A FORERUNNER OF CHRIST.

The religion of Buddha hinges upon the two ideas Sansara and Nirvana.

Sansara is the bustle of the world; it is full not only of vanity, but also of pain and misery; it consists of the many little trivialities that make up life. It is the pursuit of happiness; it is hunting for a shadow which the more eagerly it is pursued the quicker it flies.

The worldling lives in Sansara. He imagines he proceeds onward in a straight line, yet he moves in a narrow circle without being aware of it. He hastens from desire to pleasure, from pleasure to satiety and thence back to desire.

The worldling eagerly tastes the pleasure, and if he can he tastes it to the last, he intoxicates himself with it, only to find out that it was not what he had hoped for. Pleasure if tasted to the last becomes stale; it becomes staler than its symbol, the nectar of the grape that has been left in the glasses of topers after a night's carousal.

What is the result of a life in Sansara? Man's feet will become sore and his heart will be full of disappointment. The Buddhist says: The circular path of the Sansara is strewn all over with fiery coals.

Desire burns like a flame and satiety fills the soul with disgust. Enjoyment, however, is the oscillation between both. Desire is want; it is parching thirst and pinching hunger. It is destitution, poverty, dearth. Satiety, on the other hand, is not at all a preferable state. It is tedious and wearisome monotony; it is life without a purpose. The fulfilment of want means an emptiness of aspirations, it produces the nausea of maudlin misery, and the absence of desire is felt as an actual torture. A longing rises in the heart for the thirst of an unsatisfied desire and thus the pendulum swings back to the place from whence it came.

And happiness! What is the happiness of a worldling? It is merely an imaginary line between both extremes. The pendulum that swings to a certain height on the one side will necessarily reach exactly the same height on the other. It does not come to rest in the middle. There is no escape from this law, and if a man of the world be prudent he will moderate the oscillations so as to diminish the misery. Not going to the highest pitch of desire, he will not be obliged to drain the cup of myrrh to the lees.

Why does mankind continue to move in the circular course upon the fiery coals of Sansara? Because their eyes are covered with the veil of Maya. Individual existence, the Buddhists say, is a sham, an illusion, a dream woven of the subtle stuff of sensations. Man imagines that his sensory world is a reality. Buddhism teaches that the world of the senses is like a veil upon our eyes.

The veil of Maya does not exactly deceive man; on the contrary, the veil is the means by which man knows whatsoever he knows of truth. If the veil were not upon man's eyes, he would see nothing, he would be blinded, as was Moses in the presence of God. In itself the world of sensations is not a deceit, if it is not made so by being misunderstood.

The error, it is true, is natural. All errors originate according to natural laws; so did, for instance, the ideas of the flatness of the earth and of the apparent motions of the heavenly bodies. But if we err, the fault is not with the facts that lead astray, but with us. We deceive ourselves by our own error. The veil of Maya makes us feel our own being in contradistinction to that of all-existence; and this "we," the "I," the ego in its separateness is a self-deception. We live the dream of a pseudo-existence.

From the growth of the ego rise the self-seeking yearnings. Egoism begets egotism, and passions are the fruits of egotism. Passions produce pain and bring upon man the many evils of his earthly miseries.

Is there no escape from Sansara? Yes there is! The illusion that considers individual being as a reality can be destroyed. The veil of Maya can be lifted; which means, that its nature can be understood. In this way shall we recognize the error of egoism. There is no ego in the sense of a separate and individual existence, and with this truth it will dawn upon us that the regulation of action, as if there were an ego, is a fatal mistake. This mistake lies at the bottom of all the wretchedness of Sansara, and we can free ourselves only, so teaches Buddhism, by enlightenment, by understanding the truth, by abandoning the illusion. He who has attained enlightenment is a Buddha. Buddha means the enlightened one.

The highest stage of Buddhist perfection, the

stage where a man becomes a Buddha is called Nirvana. Nirvana means extinction. As a flame is extinguished and ceases to be, so the *ignis fatuus* of the ego can also be extinguished. The egoistic error being extinguished, we enter Nirvana.

Nirvana means peace; it means liberation from illusion, and thus it brings a freedom of desire.

Nirvana is not annihilation. It is the annihilation of error only; and in this respect it reveals to him who lives in Nirvana, the higher life of true reality. In Buddhistic literature Nirvana is sometimes characterized in its negative aspect as an extinction of sham-existence, and sometimes again in its positive aspect as the life of truth and immortality. It is often described in most positive terms as true happiness, as a state of perfect bliss, as living in the realm of eternity, where there is no pain, no misery, no death. This appears to be contradictory to its literal meaning, but it seems to me that it is not.

As soon as we recognize the error of individual existence, we lift ourselves above the narrowness of egoism. We can in this state of mind contemplate our own fate from a higher standpoint; we can easily and we do willingly give up our pursuit of happiness; we can live in this world as though we were not living. Our "we," our "I," our "ego," the separateness of our individuality has ceased to be, and the life of the universe lives in us. We have become stewards of cosmic existence. In this way our joys as well as our pains are transfigured and a divine peace will inherit our souls that are now free from desire.

Pain, together with the vanity of pleasure, will diminish in the degree of the enlightenment attained. This is a law that is demonstratable in such exact sciences as physiology and biology. Our scientists inform us that the use of the sensory nerves blunts feeling and favors intellection. The highest sensory nerve, in which the intellectual element is comparatively most perfect, is the optic nerve. The retina of the optic nerve, while perceiving the differences of infinitesimally small fractions in ether-waves, has become insensible to pleasurable as well as to painful feelings.

The idea of Nirvana, it must be said, is of a most dangerous character, if it is conceived as mere pessimism in its negative features alone. It will in that case lead to apathy, to destruction and death. Did perhaps Gautama Buddha himself conceive Nirvana in a spirit of negativism? Perhaps he did. At least it is certain that many of his disciples did; for the Buddhism of the East has produced most fatal effects of indifference and retrogression upon those races that embraced its faith.

If Nirvana is conceived in its negativeness, Buddhism will be a dualistic religion. In that case we have existence and non-existence, Sansara and Nirvana, sham-reality and nothingness. If, however, Sansara is conceived as an illusion and Nirvana as the destruction of the illusion, we need not resort to the nihilistic world conception of a dual nothingness; we need not derive from the Buddhistic premises the negative ethics of destroying life together with the illusion of egoism.

One of the most important truths proclaimed by Buddha, was the doctrine that man can enter into Nirvana while he lives. When Gautama had found redemption from the evils of existence, he resolved to announce his gospel to the world. He went to Benares and on the way he met one of his old acquaintances who asked him:

"What is it that makes you so glad and yet so calm?"

Buddha answered:

"I have found the path of peace, and am now free from all desires."

Little interested in Gautama's bliss, his acquaintance further enquired where he was going; and we are told in the Buddhist legend:

The Enlightened one answered:

"I am now going to the city of Benares to establish the kingdom of righteousness, to give light to those enshrouded in darkness, and open the gate of immortality to men."

He gave up fasting, for he looked upon the oppression of the body as a vain effort of conquering the evils of existence. He abandoned asceticism as a means of salvation.

It seems strange that life can be gained only through annihilation of self; immortality is possible only through the death of the transient and the happiness of eternal peace will come with the crucifixion of the desire for happiness. It seems strange, but it is not. However, it is natural that the deeper a truth is, the more contradictory it will appear to those who are prisoners still in the bondage of error.

Buddha's doctrines were misunderstood, misinterpreted, and misused. Yet they have given strength in temptation, comfort in misery, peace in tribulation, solace in death to many millions of toiling, aspiring and suffering human hearts.

ROBERT KOCH'S DISCOVERY.*

BY DR. HUGH BERNHEIM.

With great expectations we have been waiting several months for a definite word from the lips of the reticent scientist, and with enthusiasm we now receive the wonderful tidings of his ingenious discovery. The result of his researches lies now open before the world —an invaluable gift presented to mankind by a man noble in character and great as a thinker, so that like Hippocrates of yore he deserves the honorary title of "Father of Medicine."

* Translated from the *Gegenwart* by κρς.

The immortal merit of Dr. Robert Koch consists in having opened a new path to the therapeutics, not only of contagious but of all internal diseases. And the method by which he succeeded was the same as that of his illustrious precursor, William Jenner, i. e., to use the products cast out by the disease-begetting parasitic organisms as a prophylactic and therapeutic remedy. However, while Jenner owed his discovery to good fortune, while he devised vaccination in perfect ignorance of the real state of affairs; Dr. Koch, on the contrary, followed a definite plan; he went to work systematically, surveying the conditions with an unusual clearness of mind and scientific insight, until he had found the anticipated result of his labors.

The therapeutics of internal diseases had become fatally stagnant, and it was indeed necessary to make a decided step in advance. Our physicians were groping in the dark; and without knowledge concerning its aetiology, they were in search for chemical means to heal internal disease. It was not at all surprising that in this state of things quackery and the various so-called natural methods found more and more credit among the public. Our medical scientists have long since been expecting the time in which we should know more about the aetiology of the internal diseases; and this time so eagerly hoped for has come at last. A veil has been drawn from our eyes and with one prophetic glance can we now overlook the whole field and anticipate a still further progress by considering the weighty consequences of Professor Koch's discovery.

The greatest merit of Professor Koch is not that he has found a specific medicine against a disease heretofore considered incurable; not that he has found a reliable reagent and diagnostic against tuberculosis, often so insidious and hidden; Professor Koch's merit is greater; he has created the therapeutics of the future. For Professor Koch's method of curing tuberculosis is applicable to every contagious disease, as soon as we know the nature of the fatal germs, and the number of diseases now recognized to be contagious is increasing from day to day; it may now be supposed to form three fourths of all maladies.

Moreover, Professor Koch's method is prophylactic as well: it protects from contagion with certainty, and thus a revolution in all our therapeutic views and methods is near at hand, the full extent of which cannot as yet be measured. Prophylactic innoculations, it must be expected, will protect our children in the future against scarlet fever, diphtheria, measles, etc., in a similar way as vaccination against smallpox. If we are attacked by cholera or typhoid fever, we shall be cured, not with prescriptions of the old kind, but by a subcutaneous injection.

What then is this mysterious antidote? Only a few select ones are familiar with its preparation and composition. The non-initiated must patiently wait until the master shall speak, and the day when he will do so, will come soon.

Koch's medicine is a transparent, brownish fluid (as Professor Koch says in his statement) with a weak odor of carbolic acid; it contains five per cent. of carbolic acid for the sole purpose of preservation.

The new medicine cannot be a solution of gold cyanide, as has been supposed, for Koch declared in his first lecture before the International Medical Congress in Berlin, that his new medicine was no drug that could be bought at the apothecary's or made by a chemist. He mentioned solutions of gold cyanide, and praised them as being strong drugs for destroying parasites, yet he expressly added that his antidote was different.

It is most probable that Dr. Koch's fluid consists entirely or partly of ptomaïnes. Ptomaïnes are the products and cast-off residues of the albumenoids which have been transformed, or so to say, digested, by the bacilli in their process of life, perhaps mixed with other secretions of these parasitic organisms, viz., the toxic albumenoids, the virulence of which, if introduced into the blood of a live animal, produces by its specific effects upon the nervous system, e. g., upon the thermal centre in the medulla oblongata, fever, coma, cramps, vertigo, and other symptoms of contagious diseases.

To conquer the enemy with weapons furnished by himself was the grand idea of Koch. And this idea we know is also the reason for the effectiveness of Jenner's method of vaccination; vaccine also contains cast off products, the taxalbumenoids of the smallpox-begetting germs. Yet it must be remembered that the smallpox germ is no bacteria, is no plant, but according to the latest discoveries of Pfeiffer a protozoön, a unicellular creature standing upon the lowest stage of animal life.

The infallible effectiveness of Koch's cure has been demonstrated for all tuberculous diseases of the peripheral body, viz., for tuberculosis of the skin (lupus), of the glands, of the joints and of the bones. We are not so certain about reaching favorable results, in cases where internal organs are attacked, viz., the lungs, the larynx, and the intestines. The time for exact observations has been too short, and the treatment of cases of far advanced consumption has as yet proved a failure. The glorious success in curing peripheral tuberculosis might easily disappoint many exaggerated hopes. According to Koch's own statement, his medicine, if introduced by subcutaneous injection, will not destroy the tubercular bacilli, but the pulmonary tissue attacked by the bacilli. Should the lungs be in such a state that the bacilli have under-

mined large tracts, filled whole caverns, and produced, through additional and external introduction of pus-cocci, an extended suppuration, Koch's method, most likely will be of no avail, and this, we are sorry to state, has indeed been verified in the Vienna Clinic by Dr. Emmerich Ullmann.

It is for this very reason that Koch so urgently requests the detection and treatment of pulmonary phthisis in its first stage. He points out the duty of every physician to search in the sputum for bacilli upon the slightest suspicion of tuberculosis, yet it must be remembered that the absence of bacilli is no proof that there is no tuberculosis. It may happen, and indeed it does happen, that people whose sputum has never shown the slightest trace of tuberculosis, will nevertheless die of consumption. This case usually occurs if the diseased spot lies in one of the interior branches of the lungs, so that the cavern filled with pus stands in no connection with any one of the larger bronchial branches of the trachea. In this way the seat of tuberculosis is entirely isolated and nothing of its secretion or products can be thrown out. The sputum that is thrown out comes from those parts which are not infected, and naturally cannot contain bacilli.

In conclusion we have to note the movement that has been caused by Koch's discovery among the surgeons. Some time ago it had been proposed to attack pulmonary tuberculosis with the knife, i. e., to remove the diseased tissue and disinfect its surroundings. There was one reason only that forbade their ingenious operation. It had been observed that relapses could not be prevented and this was sufficient to make a surgical cure of tuberculosis a hopeless undertaking. However, at present, as matters stand now, Dr. Bergmann declared in a meeting of surgeons held November 16th at Berlin, that surgical operations should in such cases be boldly tried, "for we are now in the position," he said, "no longer to fear any relapse. We have attained all that is desirable in the field of pulmonary surgery."

We have not as yet gathered any experiences concerning tuberculosis of the meninges and of the larynx. There is no doubt that we shall find many imperfections and defects in our newly acquired knowledge as well as method, and much work is still to be done. Yet that is no reason for suppressing the general gladness which we naturally feel at this grand discovery. Let us rejoice that we live in an era in which science boldly and victoriously advances, led by a hero of scientific research like Robert Koch.

INDUSTRIAL AND REFORM SCHOOLS.

They had a sublime subject for debate at the banquet of the Sunset Club on the 20th of November; and the speeches make an epic grander than the Iliad, for their theme was the temporal salvation of little children, with "Industrial and Reform Schools" as the agents of redemption. The debate was a revelation that politically, ethically, and religiously, there is no such thing as that outcast from our affections which we call "another man's child." Every child has a personality of its own, equal in rights and value to that of the Governor or the President. It is not the property of its father or the State. These have no rights in the child, excepting such as grow out of their duties to it; and the welfare of the child is the supreme object of the rights and the duties too. The lesson of the evening was that every other man's child is our own child, having claims upon our hearts and pockets, our sympathy and care.

The first speaker was Mr. T. E. Daniels, a gentleman wearing the suggestive title of Superintendent of the Waifs' Mission; the "waifs," not goods and chattels, be it understood, but human beings, part of the "surplus population," the homeless children of the poor. The very word "waif" means a lost or abandoned thing; and that it can be properly applied to a child is of itself a reproach to this greatly overrated Nineteenth Century. Mr. Daniels found for the word a new definition which it would be well to put into the next edition of Webster's Dictionary, "the lowest of the three grades of boys, being the waif or stray, drifting about our streets night and day." Drifting? Whitherward? Let "Society" beat its drums and smother the answer.

Mr. Daniels appears to have a belief, which, let us hope, is erroneous, that evil, not good, is contagious; for in speaking of the "waifs," he said that they "should not be forced into the public schools," because "they would contaminate the better class." Waving any criticism of that sentiment, in our admiration for the enlightened benevolence that guides the Waifs' Mission in its work, we rejoice at the practical experiments described by Mr. Daniels, wherein he shows that in the case of boys at least, it is easier to prevent than to punish crime. "We do not do it," he says, "by the old method of imprisonment and threats. We treat them with kindness, just as we would our own boys, and forbear with them." By that simple formula Mr. Daniels solves the knotty problem which has baffled statesmanship for ages, "How shall we treat infant criminals?" Probably the Sunset Club never got so much good learning condensed into so short a sentence; and the temptation to repeat it is irresistible, "just as we would our own boys."

The Waifs' Mission has tested the Daniels formula and proved it a success. It has given us a demonstration that even lost and abandoned boys, "waifs," may be redeemed, and receive a new birth by the

sacrament of lunch; to quote the words of Mr. Daniels, "We first give them a lunch, and on top of that we try to put morality." The glory of the effort is that they succeed. It ruffles our self-conceit a little when we learn by the experiment of this unpretending institution that our penal statesmanship has all been wrong, and that in the application of our criminal code to girls and boys, we have treated fever with fire. In driving these "waifs" beyond the radius of our duties and responsibilities, we spurn the appeal of Christ, and accept the competing bid of the Devil as he travels the city crying "Suffer little children to come unto *me*." And we tell him to take the "waifs."

Although only a fraction of the waifs are under the care of the mission, nearly 2,000 are on its rolls, "embracing nearly every nationality," says Mr. Daniels, "except one, the Jews." They take care of their own, and the "waifs" get no recruits from them. If this is true, as we have no doubt it is, the rest of us ought to apply for seats in the Synagogue, if the Jews will accept us on probation, as they probably will not.

Although he showed the moral value of the Mission in a very modest way, Mr. Daniels was troubled somewhat at its money cost, and he had a slightly apologetic manner when he said, "If there is any way of estimating the value of a boy's soul, I think any one present will justify the whole expense of carrying on our mission work." Well, there is no way of estimating the value of a boy's soul, nor of his body either, for there may be lying hid somewhere behind his forehead a creative thought that in the fullness of its time may give this world an Archimedean lift. Who knows? Judging by the statement of Mr. Daniels, the money for the Mission is well expended whatever its amount may be.

The Rev. Dr. Hirsch spoke next, and he painted a word-picture, sad, sarcastic, and pathetic as any that Hogarth drew. He declared that our police courts were the primary schools, and our county jails the high schools, wherein our children and our youth are educated up to crime. He spoke without either doubt or fear, because he stood upon a firm foundation, built of real examples quarried out of Judge Altgeld's book. He held that boys are not responsible for their evil inclinations, because these are the sins of their fathers visited upon the children even unto the third and fourth generation. In this the orator was right, and men are beginning to understand it now. Lord Byron, when reproached by his mother for his lameness, flung back the taunt upon his parents, saying, "I was born so, mother"; and this very same answer he puts into the mouth of Manfred, the Hunchback. Dr. Hirsch contended that those hereditary vices which are beyond our surgery, were stimulated, expanded, and intensified by unnatural conditions which we can control. He said, "two factors enter into every character; one the influence which comes from our ancestors, and the other that of our surroundings." We cannot change our ancestors, but we can reform bad customs and repeal bad laws.

Dr. Hirsch, like Mr. Daniels, finds a saving grace abounding in the sacrament of lunch, for the first article in his *Credo* as he gave it at the Sunset Club was this, "I believe in the gospel of the sandwich, and the baptism of the bath tub." The allusion here was to an enthusiastic evangelist, who, some five or six years ago, was very zealous in preaching the gospel to the poor. He was not a Doctor of Divinity, and probably knew little of genuine theology, because his practice was to begin worship by administering to each member of the congregation a cup of hot coffee and a sandwich, and "on top of that" he laid the gospel of the Lord. His temple was the "desert place" down there in the shade of the Custom House, and irreverent scoffers called it "The Church of the Holy Sandwich." Although this absurd communion was very unlike the genteel and fashionable Eucharist, it had a close resemblance to the feeding of that five thousand in the "desert place" of Palestine. After a year or two the money of the evangelist gave out and his peculiar mode of worship was discontinued for the time. Rivals in the ministry laughed and said that the Church of the Holy Sandwich was a failure, but it was not, for in the eternal government there is a law of compensation, and no good deed can fail. Religiously, if not theologically speaking, not a crumb of the sandwich, nor a drop of the coffee was lost; "And whosoever shall give to drink unto one of these little ones a cup of cold water only in the name of a disciple, verily I say unto you, he shall in no wise lose his reward." And this promise will apply to a cup of hot coffee, too.

In the scheme of remedies proposed by Dr. Hirsch, the most conspicuous was the Manual Training School. He also thought the "waifs" ought to be classified, and those merely vagrants by misfortune separated from those with inherent criminal desires; and this appeared to be the opinion of Mr. O. L. Dudley, general agent of the School of Agriculture and Manual Training at Glenwood, who spoke of the work done there, and a very good work it is. We are inclined to agree with Mr. Dudley when he says, "With a beautiful farm of 300 acres, new buildings on the cottage plan just completed, the homeless street boys of Chicago can be properly cared for, saved, before they have really become criminals, and there will be no need for your reform schools." It is not likely the "waifs" can get a better moral education anywhere than they get in a school of agri-

culture, for primitive ethics is the tilling of the soil. When all other agents fail a moral character may be developed by the education of the hand.

There was political economy of good quality in this, from Mr. Dudley: "Teach the boys trades; not only educate the head, but the hand as well; make them skilled workmen at some trade or calling, then you can send them out to fight life's battle honorably and successfully. The system we have adopted is to save the children. It is preventive and natural. It is humane, and humanity and economy have no conflict. Prevention is safe and economical. Reformation is uncertain, and punishment never restores self respect. It is better to save a child than to reform or punish it." This debate fell upon some of the members like a bright light, revealing unto them, not only the right of every boy to a trade, but also the moral policy and economic wisdom of seeing that he has it. And don't forget the girls.

Dr. Hirsch, referring to our wasteful squandering of "waifs," very eloquently said that all of us were partners in their sins, and that when any one of them did wrong each one of us might say in sorrow, *mea culpa*. This, perhaps, is true, but if our sin is heavy, an easy penance lies before us, and the cost of absolution is not great. M. M. TRUMBULL.

CORRESPONDENCE.

A CRITICISM OF "FUNDAMENTAL PROBLEMS."

To the Editor of the Open Court :—

MY DEAR SIR :—I have neglected to acknowledge the receipt of your book *Fundamental Problems*.

I have pondered on these problems for more than sixty years, so I disliked to pass by the opportunity of having perhaps the last fling at a philosophy diametrically opposed to my own. I told you a few years ago that you could not get life out of inorganic matter; you told me that the idea of inorganic (dead) matter was *not tenable*. I did not conceive that you held the doctrine that all matter, *all nature is alive*. Hylozoism is a pre-socratic doctrine, and was held by the old Ionian Physiologists. Thales was a monist—held that *water* was the source of all things; other members of the school said that the source was either air, earth, or fire: Protagoras said, "Man was the measure of all things," and that as no two things are alike, so no two minds are alike; every man's measure of the universe must be different. Huxley said every man carries a universe under his hat, but he recently said that the sage was *sadly in the wrong*.

One of the Problems that you hold is that of Universality of Life and Mind. I cannot accept this because it is not proven; I cannot dogmatize, and say from a monistic conception of the universe, there is no doubt that the forms of organized life which now exist on our planet originated from the *forms* of "inorganic life." There was a time, you say, when the state of the earth made animal and plant life impossible. How organized life originated is not yet solved, but the solution is not beyond the reach of science. (Page 112). "Inorganic life" is a trick of language, and by playing such tricks (G. H. Lewes says) and by stretching terms it is easy to identify life with molecular change.

You say the world substance is as Spinoza held *One*. He said it had two attributes, and many modifications. And that to search for a beginning of life is wrong, as it is to search for the origin of matter. I agree with you—the founder of the Huttonian theory of Geology said that, in the economy of the world he saw no evidence of a beginning, and no prospect of an end "The world substance acts of itself." Many men have tried in vain to explain the origin of the world from dead matter; but you say, in consequence of the fact that Monism accepts the idea that "nature is alive," is "one great and living whole of which man is a part" (which contains in its form the quintessence of life), a time will come when men will be obliged to use the term psychical in a broader sense, and speak of a *psychology of atoms and molecules*.

To this doctrine that *all Nature is alive*, which Naegeli discussed at the meeting of German Naturalists at Munich in 1877, Virchow strongly objected. When it is proved that psychology equally belongs to the domain of animal and vegetable life as well as of inorganic matter; then, said Virchow, the universality of Life and Mind may be taught in the schools. There is no doubt that mental phenomena pertain to certain animals, but not to the totality of all organic beings. There is no reason to say that psychic attributes reside in other animals than man. There are certain gradations from mental to physical nature, and I do not declare it is impossible to bring psychical phenomena into immediate connection with physical ones. I object to setting down this possible connection as a "scientific doctrine." With regard to this connection nothing is really known. It is easy to say a cell consists of small particles called plastidules. Plastidules are composed of carbon, hydrogen, oxygen, and nitrogen; all these atoms are endowed with a special soul, the sum of the forces which the chemical atoms possess. Virchow says this may be so, it is very fine; but until the properties of the atoms are defined I cannot understand how a soul can result from their combination. Therefore he says the plastidule soul must not be introduced into the educational programme; and every educated man must not be asked to recognize as a scientific truth the plastidule soul as a basis for a conception of the universe. As an instance of the danger, Virchow says, in opposition to the doctrine of the development of organic life from inorganic matter, he once laid down the proposition that every cell had its origin in a pre-existing cell. The proposition was taken up by others and made valid beyond the limits of organic life. He had letters from men in Europe and America who based the whole of Astronomy and Geology on the cellular theory. Virchow could not pronounce all these men to be fools and simpletons. Some of their arguments showed that they were men of education who had studied much and who in their pursuit of a monistic conception of nature had reached the conclusion that the whole universe was built up and governed on the cell-principle. Virchow said of Naegeli's proposition, he had no objection to carbon atoms having souls; but in declaring attraction and repulsion to be psychic phenomena he was throwing Psyche out of the window, and Psyche is Psyche no longer. In the fourth volume of the Problems of Life and Mind, 1880, G. H. Lewes follows Virchow, and says there has recently sprung up a chorus of voices not always accordant, who proclaim that if the Law of Continuity is true and the doctrine of Evolution they force the conclusion that all Nature is alive and sentient.

He says the hypothesis rests on an arbitrary extension of terms, and an exclusive selection of conceptions. By rendering terms very elastic it is easy to reduce all diversity to identity. Life and Mind are present from the first; the more conspicuous manifestations are the results of evolution. All things are alike if points of unlikeness are disregarded. In recent speculations it is considered that the irritability in plants, is identically the same molecular disturbance as the sensibility of animals, and thence all molecular disturbance is evidence of sensibility. In confounding

the conception of Life with that of Existence, Lewes asks: "Why should not a lamp-post feel and think, since it exists, and is subject to molecular changes consequent on impression?" This question seems absurd, but when it is remembered that the adherents of the school of Naegeli hold that all material phenomena are composed of the motions of molecules and elementary atoms, so pleasure and pain, must have had their origin in the infinitesimal atoms, and must have been caused by the manner in which the atoms respond to each other in their attracting or repelling forces. Sensation, therefore, is a property of the albumen molecules, and if this is granted Naegeli says, it must be granted to the molecules of all other substances. If two molecules feel an attraction or repulsion for each other they either approach or move away, and if they possess a relation to sensation however distant, which Naegeli cannot doubt, since each one feels the presence, the mutual condition of the other, each inclines to move, and if it really begins to move, becomes alive as it were. Such molecules are the elements which cause pleasure and pain, and if the molecules feel something related to sensation, it must be pleasure if they respond to attraction and repulsion, i. e., follow their inclination or dis clination. Your arguments in favor of all Nature being alive have as little objective basis as those of Naegeli; I wonder that Lewes undertook their refutation.

We should never lose touch with the past, nor with the present, which I think you do in ignoring Weismann's theory of the Continuity of Germ-plasma. A fundamental problem in the doctrine of Matter, Life, and Mind, which has been overlooked, is now made clear; it bears strongly on the three principles enumerated above in regard to their eternity. In the multiplication of the one-celled organisms (such as the Amœba) "nothing dies," the body splits into two, but where is the dead body? Here is neither birth nor death—reproduction without generation,—without parthenogenesis, or alternate generation. Weismann converted the conception of the idioplasma of Naegeli into two distinct elements in embryology, thus removing it outside of monism. Life depends on metabolism, on a constant change of material. That required for embryogenesis is called the continuity of germplasma, and the other element is called somato or body-plasma. What is immortal in the germ-plasma, is a definite form of activity, whatever that may mean.

JOHN CHAPPELLSMITH.

[Our venerable friend, Mr. Chappellsmith, is mistaken when he thinks that we lose sight of the truth (demonstrated by Weismann for unicellular organisms), that potential immortality consists in the preservation of a definite form of activity.—Ed.]

BOOK REVIEWS.

THE GOLDEN FLOWER CHRYSANTHEMUM. Verses by Edith M. Thomas; Richard Henry Stoddard; Alice Ward Bailey; Celia Thaxter; Kate Upson Clark; Louis Carrol; Margaret Deland; Robert Browning; and Oliver Wendell Holmes. Collected, arranged, and embellished with original designs, by *F. Schuyler Matthews*. Illustrated with reproductions of studies from nature in water color, by James and Sidney Callowhill, Alois Lunzer, and F. S. M. Lithographed and printed by L. Prang & Co., Publishers, Boston.

Chrysanthemum, the golden flower, is the rose of the wintry season; for it is not only the queen among the lovely daughters of Flora in the fall, but it rivals also her beautiful sister of the summer months by the uncounted variety of species in which we possess it.

> "God's wondrous sweet thought of the rose
> In a blushing chrysanthemum grows:
> And under October's chill moon
> Blooms another rose-beauty of June."

This idea is, as it were, the keynote of the book before us. We are presented with a number of exquisite illustrations of the best known and most beautiful species of golden flower, most artistically executed and gathered in a volume appropriately bound and decorated. Every illustration is accompanied with a thoughtful poem. Kate Upson Clark says:

> "A rose and the heart of a rose,
> But a heart of yellow fire,
> Like a crater that seethes and glows,
> Tossing lava of delicate rose,—
> Lava-quills, rose-red, around;
> (Till its beautiful waves are piled,—
> Waves born of the crater wild,—
> Like a pitiful, perfumed mound
> Of love, pure undefiled,
> On the grave of a dead desire.)
> * * *
> Thou meanest more than a rose,
> Chrysanthemum, rare and round!"

Celia Thaxter closes one of her poems entitled Christmas Eve with these lines:

> "Climb thou and cling, nor ever lose thy hold!
> Ask of thy year a happiness divine,
> Trust not the shows of Earth, its fame or gold,
> But seek the highest good, it shall be thine!"

It would lead us too far, if we were to quote the thoughtful strains of Browning and other poets represented in this book. So we will close our review of this most beautiful Christmas gift with the last verse of the last poem, which is by Oliver Wendell Holmes, who addresses the golden flower with these words:

> "Thy smile the scowl of winter braves
> Last of the bright-robed flowery train,
> Soft sighing o'er the garden graves,
> 'Farewell! farewell! We meet again?'
> So may life's chill November bring
> Hope's golden flower, the last of all,
> Before we hear the angels sing
> Where blossoms never fade and fall."

CIVIL GOVERNMENT IN THE UNITED STATES CONSIDERED WITH SOME REFERENCE TO ITS ORIGINS. By *John Fiske*. Boston and New York: Houghton, Mifflin, and Company. 1890.

We have here a popular account of civil government in his country, comprising that of the State as well as of the Federal Union, showing their origins. This may be termed political or constitutional government, as distinguished from social government, a full account of which in the Township, the County, and the City is given, tracing its beginnings in English institutions.

Professor Fiske assigns the proper position to the State, as the real basis of the Nation, and the space which he has devoted to the township, county, and city is not too long, considering their importance in the life of the people. His work is admirably adapted for the purpose for which it was written, that is, for use as a text-book, and at the same time for the service of the general reader, who will do well to bear in mind the remark that "every institution is the outgrowth of experiences." Its educational value is increased by the addition of "Suggestive Questions and Directions," prepared by Mr. F. A. Hill, and of bibliographical notes at the end of each chapter.

THE STORY OF THE ILIAD. By *Dr. Edward Brooks*, A. M. Philadelphia: The Penn Publishing Company. 1890.

The object of Dr. Brooks in putting the great Greek epic into prose was to supply young readers with something to take the place of the weak and vapid literature now so much read, and to give them a taste for what is elevated and enduring. Dr. Brooks's version of Homer's story runs easily and probably will recommend itself to those for whom it is intended.

HOUSEHOLD HYGIENE. By *Mary Taylor Bissell*, M. D. New York: N. C. Hodges. 1890.

A manual of valuable suggestions regarding sanitary house-building and housekeeping, for the information of the women of

the household as those to whom the sanitary regulation of the home is generally relegated. The contents have mainly appeared as contributions to the Art Interchange Company. This little volume is one of Mr. Hodges's "Fact and Theory papers."

BOOK NOTICES.

We have received from S. A. Maxwell & Co., a copy of "All around the year 1891" calendar, published by Lee & Shepard of Boston. It consists of fourteen cards with charmingly tinted illustrations of child-life by Pauline Sunter.

Messrs. Taylor, Austin & Co., of Cleveland, Ohio, have issued in small pamphlet form Cardinal Newman's excellent "Definition of a gentleman."

Messrs. Roberts Brothers of Boston have just published a tastefully got up edition of Sir Edwin Arnold's "The Light of Asia," with a series of illustrations taken chiefly from photographs of Buddhist sculptures and frescoes found in ancient ruins of India averaging 2000 years old, representing scenes in the life of the founder of Buddhism. The design on the cover illustrates the four principal events in the life of Gautama, the Birth, the Meditation, the Preaching and the Nirvana, as represented on a bas-relief found at Sarnath near Bernares.

Mr. James Goldsmith of New York has published an Ethical Society's Album, consisting of a series of portraits on celluloid of the leaders of the Ethical Culture Movement.

Christ : the Pupil of Buddha. A Comparative Study, founded on Lillie's "Buddhism in Christianity," giving in parallel columns the traditions relating to Jesus and Gautama, and some of their doctrinal teachings. (Brentano, New York.)

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